

REMARKS

Claims 1-25 are currently pending in the subject application. Claim 1 is the sole independent claim.

Applicants note that the supplemental Office Action Made Final, mailed December 16, 2005, indicates that claim 15 is rejected under both 35 U.S.C. §§ 102(e) and 103(a). Applicants believe that the rejection of claim 15 under 35 U.S.C. §§ 102(e) was the result of a typographical error, and respectfully request that the Examiner clarify the status of claim 15 in the next Office action.

Claims 1-25 are presented to the Examiner for further prosecution on the merits.

A. Introduction

In the outstanding Office Action Made Final, mailed December 16, 2005, the Examiner rejected claims 1, 4-7, 12, 13, 15 and 20-22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0035961 to Natori et al. ("the Natori et al. reference"); rejected claims 2, 3, 14, 15 and 23-25 under 35 U.S.C. 103(a) as being unpatentable over the Natori et al. reference in view of U.S. Patent No. 6,229,166 to Kim et al. ("the Kim et al. reference"); and objected to claims 8-11 and 16-19 as being dependent upon a rejected base claim, while indicating that claims 8-11 and 16-19 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

B. Conversation with the Examiner

On December 6, 2005, the applicants' representative contacted the Examiner regarding inconsistencies in the status of the claims. In particular, it was noted that the Office Action Made Final mailed on November 1, 2005, indicated that claims 10, 11, 18 and 19 were withdrawn, yet neither applicants nor the Examiner had withdrawn these claims.

In response to the applicants' inquiry, the Examiner issued the outstanding supplemental Office Action Made Final on December 16, 2005. Applicants appreciate the Examiner's efforts in clarifying the status of the claims.

C. Asserted Anticipation Rejection

In the outstanding Office action, the Examiner rejected claims 1, 4-7, 12, 13, 15 and 20-22 under 35 U.S.C. § 102(e) as being anticipated by the Natori et al. reference.

Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of anticipation for at least the reasons set forth below.

Claim 1 recites:

A ferroelectric capacitor, comprising:
a lower electrode, a dielectric layer, and an upper electrode layer,
which are sequentially stacked,
wherein the dielectric layer has a multi-layer structure including
a plurality of sequentially stacked ferroelectric films, wherein two
adjacent ferroelectric films have either different compositions or
different composition ratios, and wherein at least one ferroelectric film
is a BSO-PZT film.

In the outstanding Office action, the Examiner asserted that the Natori et al. reference teaches, *inter alia*, a dielectric layer 6 having a multi-layer structure including a plurality of sequentially stacked ferroelectric films, wherein two adjacent ferroelectric films have different compositions sequentially stacked. *Office action of December 16, 2005, at page 2*. However, applicants respectfully submit that the Natori et al. reference fails to disclose, or even suggest, each and every element of claim 1.

In particular, applicants note that claim 1 recites "and wherein at least one ferroelectric film is a BSO-PZT film." Applicants respectfully submit that the Natori et al. reference fails to disclose this aspect of claim 1. In the outstanding rejection, the Examiner asserted that adjacent ferroelectric films are taught by features 310 and 320 of the Natori et al. reference. Applicants respectfully submit that neither feature 310 nor feature 320 is a

BSO-PZT film and, furthermore, a BSO-PZT film is neither disclosed nor suggested anywhere in the Natori et al. reference.

In detail, the Natori et al. reference discloses forming ceramic films from first through third “ceramic raw material liquids,” which are formed by mixing first and second, third and fourth, and fifth and sixth “raw material liquids,” respectively. However, not one of the first through third ceramic raw material liquids corresponds to a BSO-PZT film. The first and second raw material liquids are both bismuth-based liquids. *The Natori et al. reference, paragraphs [0160] and [0162]*. The third raw material liquid is for a PZT type ceramic, and the fourth raw material liquid is a lead-based liquid. *The Natori et al. reference, paragraphs [0193] and [0195]*. The fifth is *either* a bismuth-based *or* a PZT-based liquid, while the sixth raw material liquid is germanium-based. *The Natori et al. reference, paragraphs [0209] and [0210]*. Thus, none of the ceramic raw material liquids contain the components necessary to form the BSO-PZT film recited in claim 1.

Applicants respectfully submit that the Natori et al. reference fails to disclose, or even suggest, each and every element of claim 1 for at least the reasons set forth above. Accordingly, claim 1 is believed to be allowable over the cited prior art. The remaining rejected claims, viz., claims 4-7, 12, 13, 15 and 20-22, depend, either directly or indirectly, from claim 1, and are therefore believed to be similarly allowable. Accordingly, applicants respectfully request that this rejection be reconsidered and withdrawn.

D. Asserted Obviousness Rejection

In the outstanding Office action, the Examiner rejected claims 2, 3, 14, 15 and 23-25 under 35 U.S.C. § 103(a) as being unpatentable over the Natori et al. reference in view of the Kim et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

Claims 2, 3, 14, 15 and 23-25 depend, either directly or indirectly, from claim 1, and claim 1 is believed to be allowable for at least the reasons set forth above. In addition, the Kim et al. reference fails to provide the teachings noted above as missing from the Natori et al. reference. Therefore, applicants respectfully submit that claims 2, 3, 14, 15 and 23-25 are allowable, and respectfully request that this rejection be reconsidered and withdrawn.

E. Allowable Subject Matter

In the outstanding Office action, the Examiner objected to claims 8-11 and 16-19, while indicating that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants appreciate this indication of allowable subject matter. However, all of the pending claims are believed to be allowable.

F. Conclusion

Since the cited prior art relied on to reject the claims of the subject application fails to anticipate or render obvious the present invention, applicants respectfully submit that claims 1-25 are in condition for allowance, and a notice to that effect is respectfully requested.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

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**PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.